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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,067	08/20/2003	Masato Suzuki	031034	4345

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EXAMINER

RODRIGUEZ, SAUL

ART UNIT PAPER NUMBER

3681

DATE MAILED: 11/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,067

Applicant(s)

SUZUKI ET AL.

Examiner

Saúl J. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

This is a first office action on the merits of patent application S. N. 10/644,067.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

Applicant's election without traverse of Group II in the reply filed on September 24, 2004 is acknowledged.

Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on September 24, 2004.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('942) in view of Suzuki et al. ('629) and further in view of Stefanutti et al. ('288).

Suzuki discloses a friction material comprising a core (32), a friction material substrate with segments (33) joined to the core wherein the side portions form straight lines with chamfered portions. Suzuki et al. does not teach if the sides are formed by press forming, if the segments are adhered to the core, or if the core is made of metal.

Concerning the manufacturing method, the method is not germane to the issue of patentability of the device itself. However, for the sake of completeness, it is noted that Suzuki et al. --that belongs to the same assignee-- discloses a friction material comprising a core (1), a friction material substrate with segments (2) adhered to the core and having sides press formed producing a chamfered gap/groove with rounded corners. Then, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the segments to the core and press form the rounded sides of the segments of Suzuki in view of Suzuki et al. to use known methods of forming to obtain the desired configuration.

Concerning the material of the core, Stefanutti et al. discloses a friction material comprising a metal core (1), a friction material substrate with segments adhered to the core. Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use metal for the core of Suzuki in view of Suzuki et al. in further view of Stefanutti to provide a durable and inexpensive base for the segments.

Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki ('942) in view of Kitaori et al. ('190) and further in view of Stefanutti et al. ('288).

Suzuki et al. does not teach a gap having a larger width at an outer periphery, if the segments are adhered to the core, or if the core is made of metal.

Kitaori et al. discloses the aforementioned basic configuration (Fig. 3). Then, it would have obvious to have gaps having a larger width at an outer periphery in the device of Suzuki in view of Kitaori to reduce the fluid shear between the components.

Concerning the material of the core and the adhesion of the segments, Stefanutti et al. discloses a friction material comprising a metal core (1), a friction material substrate with segments adhered to the core. Then, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use metal for the core of Suzuki in view of Kitaori et al. in further view of Stefanutti to provide a durable and inexpensive base for the segments. Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adhere the segments to the core of Suzuki in view of Kitaori et al. in further view of Stefanutti to securely fix the segments to the core.

Concerning the size of the outer periphery of the gap with respect to its inner periphery, Suzuki in view of Kitaori et al. in further view of Stefanutti discloses the claimed invention except for claimed proportions. It would have been an obvious matter of design choice to chose the claimed proportions, since such a modification would have involved a mere change in the size of a component. A change in size is generally

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recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Staub, Jr. ('978), Peng et al. ('259), and Schoder ('621) disclose other friction plates having segments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saúl J. Rodríguez whose telephone number is (703) 308-7575. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SJR


Saúl J. Rodríguez
Examiner
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